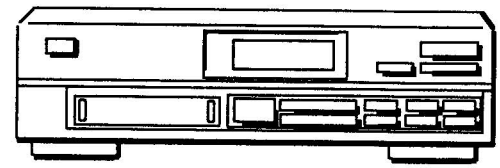
S/M Code No.89 – 052 DATE OF ISSUE 7/1989 – I

AIWA®

SERVICE MANUAL

DX-M909
DX-M779
DX-M745



COMPACT DISC PLAYER

• BASIC CD MECHANISM : CD710 • TYPE. Y,YU,YK

SPECIFICATIONS

AUDIO

Number of Channels:	2
Frequency Response:	5–20,000 Hz ± 1 dB
Signal-to-Noise Ratio:	Better than 96 dB (1 kHz)
Dynamic Range:	Better than 90 dB (1 kHz)
Harmonic Distortion:	0.012% (1 kHz)
Wow and Flutter:	Unmeasurable (Quartz accuracy)
Channel Separation:	Better than 80 dB (1 kHz)

PICK UP

Type:	Optical 3-beam laser pickup
Laser Type:	AlGaAs type semiconductor laser (λ=790 nm)

SIGNAL FORMAT

D/A Converter:	16-bit linear
Error Correction:	CIRC (Cross Interleave Reed Solomon Code)
Sampling Frequency:	44.1 kHz
Channel Modulation Code:	EFM (Eight to Fourteen Modulation)

DISC

Type:	Compact Disc
Playing Time:	Approx. 60 min.
Diameter:	120 mm/80 mm
Thickness:	1.2 mm
Track Pitch:	1.6 μm

GENERAL

Dimensions (W × H × D):	360 × 103 × 340 mm (14-1/4" × 4-1/8" × 13-1/2")
Weight (net):	4.1 kg (9 lbs.)

• Design and specifications are subject to change without notice.

※Model DX – M909 is a compact disc player for the exclusive use of the CUD – 909, CUM – 909 and CUDP – 909 system.

※Model DX – M779 is a compact disc player for the exclusive use of the X – 79M, CPD – 779 and XSD – 779 system.

※Model DX – M745 is a compact disc player for the exclusive use of the S – 745M system.

AIWA Co., Ltd.

Tokyo Japan

Printed in Japan

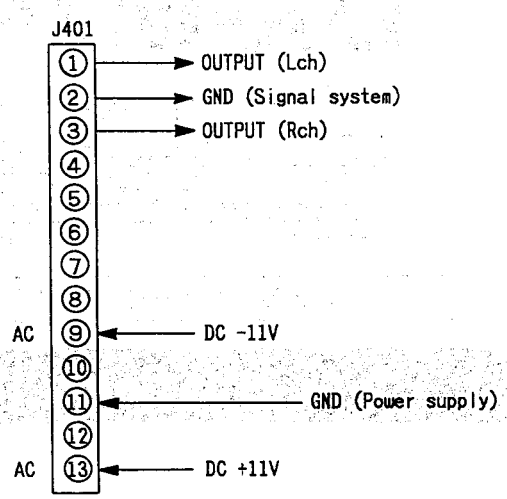
CAUTIONS WHEN SERVICING (DX-M909)

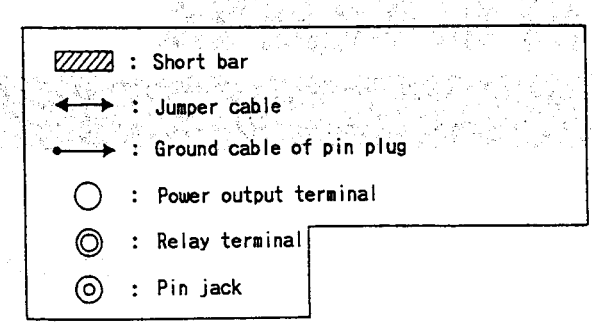
Model DX-M909 do not have a power transformer and receive their power supplies from the MX-D909 through a 13-pin flat cable.

When servicing the DX-M909, connect it to the MX-D909. If the MX-D909 is not available, follow the procedure below.

[When servicing the unassembled DX-M909]

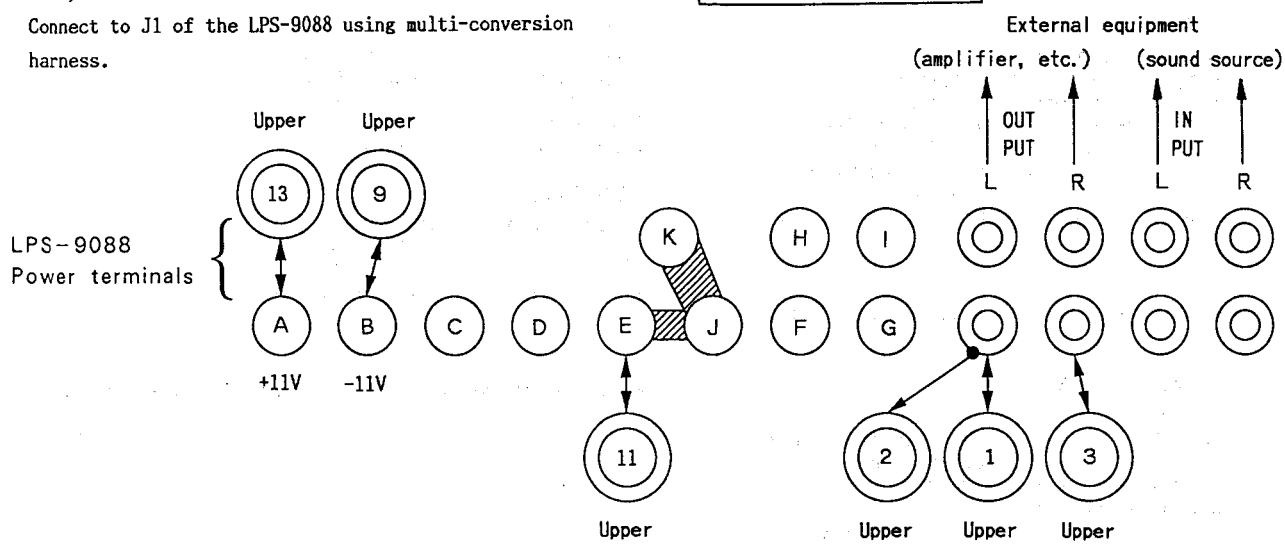
① Supply the following voltages to each pin of J401 from external power supply equipment.





② Connection diagram when using multi-power supply (LPS-9088)

Connect to J1 of the LPS-9088 using multi-conversion harness.



The Magazine Type Multi-Play CD Players with mark and the Magazines with the same mark are compatible for 5-inch (12 cm) discs.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

"Denna apparat innehåller laserkomponent som avger laserstrålning som överskrider gränsen för laserklass 1."

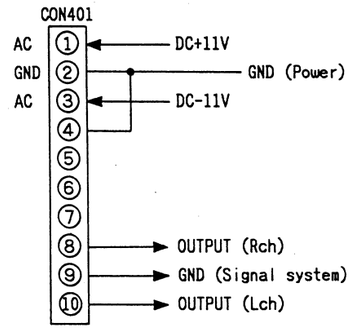
CAUTIONS WHEN SERVICING (DX-M779/M745)

Model DX-M779/M745 do not have a power transformer and receive their power supplies from the CX-779/745 through a 10-pin flat cable.

When servicing the DX-M779/M745, connect it to the CX-779/745. If the CX-779/745 is not available, follow the procedure below.

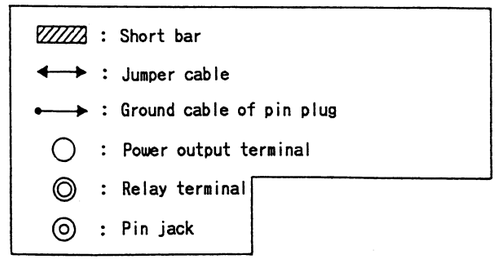
[When servicing the unassembled DX-M779/M745]

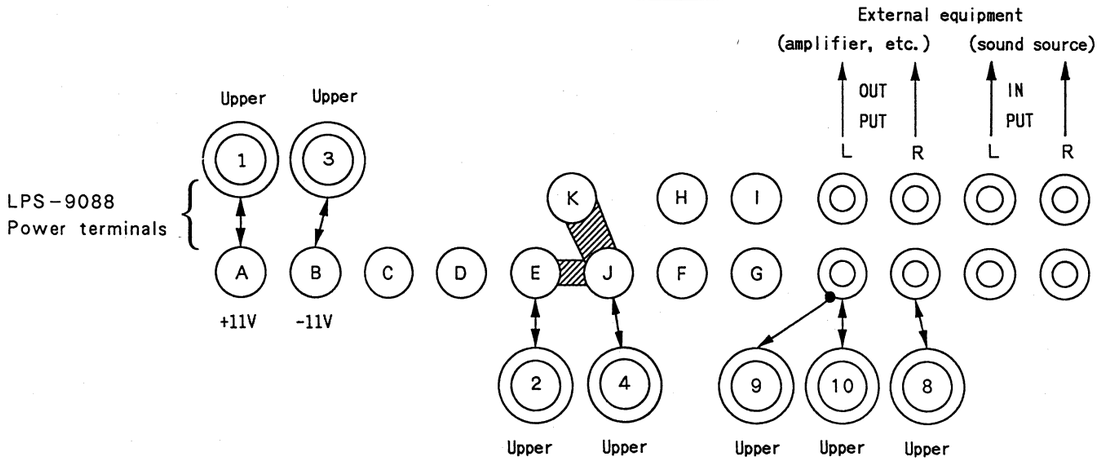
① Supply the following voltages to each pin of CON401 from external power supply equipment.



② Connection diagram when using multi-power supply (LPS-9088)

Connect to J1 of the LPS-9088 using multi-conversion harness.





CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

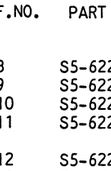
"Varoitus! Suojakoteloa ei saa avata. Laite sisältää laserdiodin, joka lahettää näkymätöntä silmille vaarallista lasersäteilyä."

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

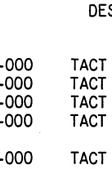
CLASS-1
LASER-PRODUCT

ELECTRICAL MAIN PARTS LIST

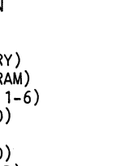
REF.NO.	PART NO.	DESCRIPTION
=== IC ===		
	87-020-793-010	IC,CXA-1081M
	S1-4D0-354-000	IC,CXA-1082AQ
	S1-4D0-373-000	IC,CXD-1135QZ
	S1-4D0-655-000	IC,CXP-5058H-5120
	SL-C35-16A-M15	IC,LC3516AM-15
	87-027-963-010	IC,NJM072S
	87-001-750-010	IC,NJM2058
	SN-JM4-558-LD0	IC,NJM4558LD
	87-020-863-010	IC,PCM56P
	S1-4D0-249-000	IC,PST52OF
	87-027-938-010	IC,TC4053BP
=== TRANSISTOR ===		
	89-109-330-010	TRANSISTOR,2SA933
	S2-SA9-340-000	TRANSISTOR,2SA934
	S2-SA1-431-000	TRANSISTOR,2SA1431
	S2-SB9-11M-000	TRANSISTOR,2SB911M
	S2-SB1-009-000	TRANSISTOR,2SB1009
	S2-SC1-740-000	TRANSISTOR,2SC1740
	S2-SC2-060-000	TRANSISTOR,2SC2060
	89-328-785-010	TRANSISTOR,2SC2878
	S2-SC3-671-000	TRANSISTOR,2SC3671
	S2-SC3-811-000	TRANSISTOR,2SC3811
	S2-SD1-227-M00	TRANSISTOR,2SD1227M
	89-413-023-010	TRANSISTOR,2SD1302
	S2-SD1-380-000	TRANSISTOR,2SD1380
	87-026-214-010	TRANSISTOR,DTA114ES
	87-026-220-010	TRANSISTOR,DTC114ES
=== DIODE ===		
	S1-SR3-910-0A0	DIODE,1SR-35-100
	87-020-465-010	DIODE,1SS133
	87-020-123-010	DIODE,DS446
	87-027-457-010	DIODE,ZENER 5.1V
	87-027-226-010	DIODE,ZENER 5.6V
	SM-TZ6-8B0-000	DIODE,ZENER 6.8V
	SM-TZ8-2A0-000	DIODE,ZENER MTZ8.2A
=== MAIN CIRCUIT BOARD SECTION ===		
CON401	*SE-350-107-000	CONNECTOR ASSY 10P(DX-M779/M745)
J401	*S1-780-242-000	FG CONNECTOR 13P(DX-M909)
L101	*S1-812-142-000	LOW PASS FILTER
L201	*S1-812-684-000	LOW PASS FILTER(SHIELD)
L501	*S2-168-100-000	MICRO INDUCTOR 10UH(LA03)
L502	*S2-165-100-000	MICRO INDUCTOR 10UH(LA02)
L503	*S2-165-100-000	MICRO INDUCTOR 10UH(LA02)
L504	*S1-17B-061-000	CHOKE COIL 120UH
L505	*S1-17B-061-000	CHOKE COIL 120UH
⚠R536	*S5-362-479-000	RES,FUSE 4.7 1/2W
⚠R537	*S5-362-479-000	RES,FUSE 4.7 1/2W
SF501	*S1-38N-782-000	SFR 20K
SF502	*S1-38N-782-000	SFR 20K
SF503	*S1-38N-784-000	SFR 50K
SF504	*S1-38N-782-000	SFR 20K
SF505	*S2-38N-111-000	SFR 2K
X501	*S1-811-201-000	X TAL 16.934MHZ
=== CONTROL CIRCUIT BOARD SECTION ===		
FL1	S1-833-098-000	FLUORESCENT DISPLAY
L701	*S2-152-101-000	MICRO INDUCTOR 100UH
L702	*S2-152-101-000	MICRO INDUCTOR 100UH
S7	S5-622-157-000	TACT SW(TRACK/TIME)
S8	S5-622-157-000	TACT SW(MEMORY)
S9	S5-622-157-000	TACT SW(PROGRAM)
S10	S5-622-157-000	TACT SW(DISC 1-6)
S11	S5-622-157-000	TACT SW(F.FWD)
S12	S5-622-157-000	TACT SW(F BWD)
S13	S5-622-157-000	TACT SW(F SKIP)
S14	S5-622-157-000	TACT SW(B SKIP)
S15	S5-622-157-000	TACT SW(EJECT)
S16	S5-622-157-000	TACT SW(STOP)
S17	S5-622-157-000	TACT SW(PLAY/PAUSE)
S18	S5-622-157-000	TACT SW(REPEAT)
T701	*S1-140-195-000	COIL,OSC
=== POWER SW CIRCUIT BOARD SECTION ===		
S801	S5-622-162-000	PUSH SW(POWER)
=== MECHA SW CIRCUIT BOARD SECTION-1 ===		
IC408	S1-812-399-000	PHOTO INTERRUPTER SPI-505
S1	S1-624-164-000	LEAF SW DISC 1(DISC1)
=== MECHA SW CIRCUIT BOARD SECTION-2 ===		
S2	S1-624-153-000	MICRO SW SLIDE(LOAD1)
S3	S1-624-153-000	MICRO SW SLIDE(LOAD2)
=== MISCELLANEOUS ===		
M1	S1-640-280-000	MOTOR DISC(RF310T)
M2	S1-640-280-000	MOTOR FEED(RF310T)
M3	S1-640-347-000	MOTOR LIFT
M4	S1-640-346-000	MOTOR LOADING
PU1	S1-540-023-000	LASER PICK-UP(SF-88NFK2)
S4	S1-624-155-000	MICRO SW SLIDE(MAGAZINE LOCK)
S5	S1-624-156-000	MICRO SW SLIDE(MAGAZINE IN)
S6	S1-624-161-000	MICRO SW SLIDE(P.U SW)



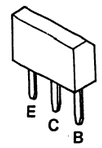
2SA933
2SA934
2SC1740
2SC2060
2SC2878
2SC3811
2SD1302



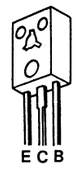
DTA114
DTC114



2SB911
2SD1227

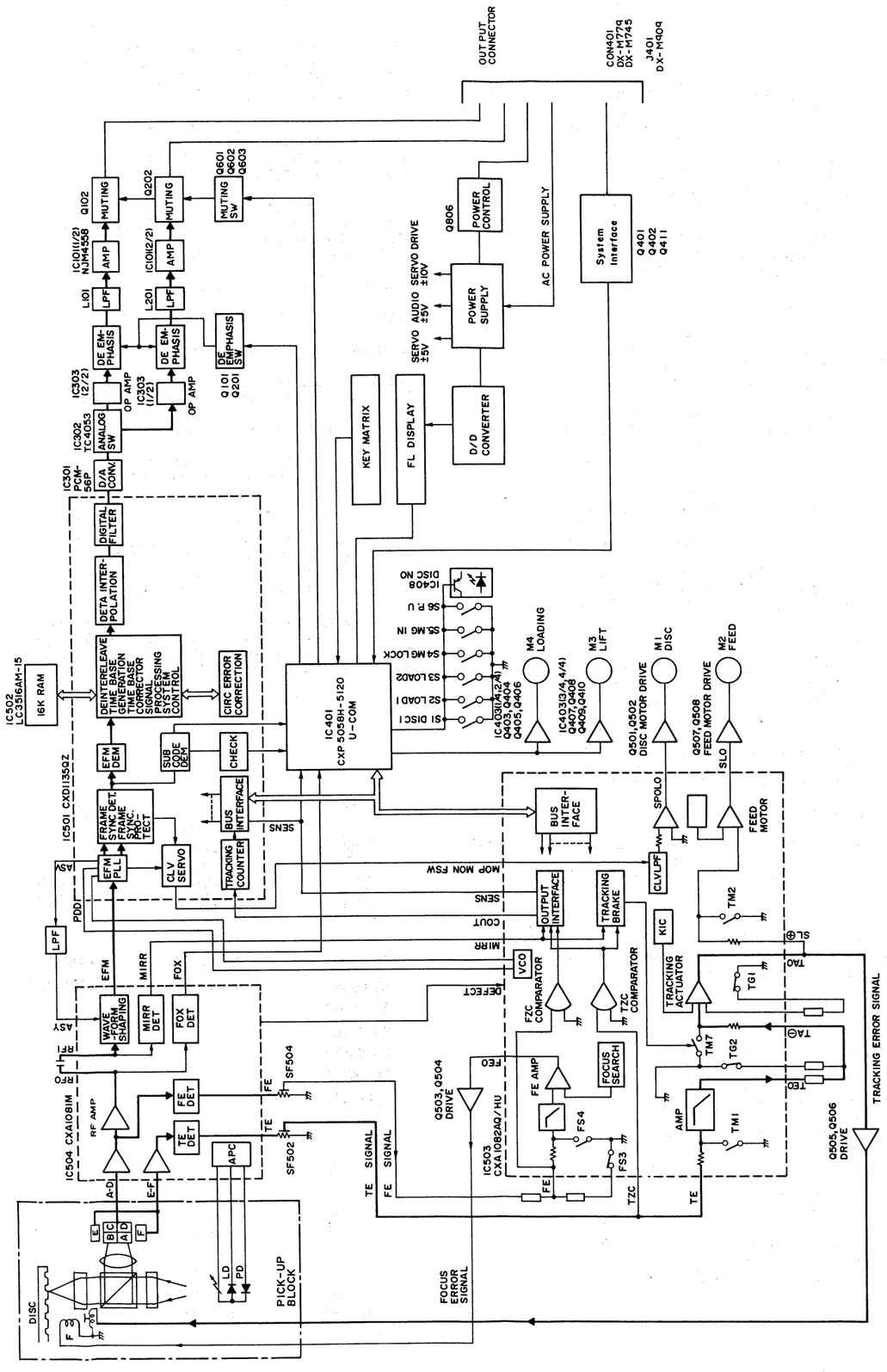


2SA1431
2SC3671



2SB1009
2SD1380

BLOCK DIAGRAM



IC DESCRIPTION

CXP5058H-5120

Pin No.	Pin Name	I/O	Description
1～3	NC	–	(Key matrix select signal.) Not used.
4	NC	–	Non-connected terminal.
5～11	a～g	O	Fluorescent indication lamp segment signal.
12	h	O	Fluorescent indication lamp segment signal.
13～21	NC	–	Non-connected terminal.
22～28	G7～G1	O	Fluorescent indication lamp grid signal.
29	SCOR	I	Q data cycle signal input.
30	XTAL	–	Non-connected terminal.
31	EXTAL	I	Clock input (4.2336MHz).
32	RST	I	RESET signal.
33	NC	–	Non-connected terminal.
34	V_{DD}	–	+5V.
35, 36	SMO1, SMO2	O	Lift motor drive output. UP: SMO1 "L", SMO2 "H" DOWN: SMO1 "H", SMO2 "L" STOP: SMO1 "L", SMO2 "L"
37, 38	LMO1, LMO2	O	Loading motor drive output. IN: LMO1 "L", LMO2 "H" OUT: LMO1 "H", LMO2 "L" STOP: LMO1 "L", LMO2 "L"
39, 40	LD1, LD2	I	Loading SW1, SW2 input signal. EJECT: LD1 "H", LD2 "L" Neutral point: LD1 "H", LD2 "H" Loading: LD1 "L", LD2 "H" Chucking complete: LD1 "L", LD2 "L"
41	DS1	I	Disc No. 7 switch input ("L": Disk No. 1 select).
42	PHT	I	Photo-interrupter input ("H": Selection position).
43	NC	–	Non-connected terminal.
44	SQCK	O	Q data read clock.
45	SO	–	Non-connected terminal.
46	SUBQ	I	Q data input.
47, 48	MZIN1, 2	I	Magazine input sensing signal ("L": Magazine IN).
49	SDATA	I/O	Synchro-data signal.
50	BUST	I/O	Synchro-BUST signal.
51	CLX	O	Control data clock signal output.
52	XLT	O	Control data latch signal output.
53	DATA	O	Control data signal output.
54	LDC	O	Laser ON/OFF ("L"/"H") signal output.
55	F/K	I	Fixed at "L".
56	TEST	I	Fixed at "H".
57	GFS	I	EFM cycle OK ("H") input.
58	FOK	I	Focus OK ("H") input.
59	MUTG	O	Digital mute ON/OFF ("H"/"L") signal output.
60	NC	–	Non-connected terminal.
61	SENSE	I	Sensing signal input.
62	RMC	I	Remote control signal input.
63	AMUTE	O	Analog output mute ON/OFF ("H"/"L") signal output.
64	ENPH	O	Emphasis ON/OFF ("H"/"L") signal output.

Pin No.	Pin Name	I/O	Description
65	NC	—	Non-connected terminal.
66	NC	—	Non-connected terminal.
67~70	K00~K03	I	Key matrix signal.
71	Vss	—	GND.
72	TX	—	Non-connected terminal.
73	NC	—	Non-connected terminal.
74	TEX	—	Fixed at +5V.
75	V_{REF}	—	Fixed at +5V.
76	V_{FDP}	—	Power supply for fluorescent indication lamp.
77~80	KD0~KD3	O	Key matrix selection signal.

PCM56P

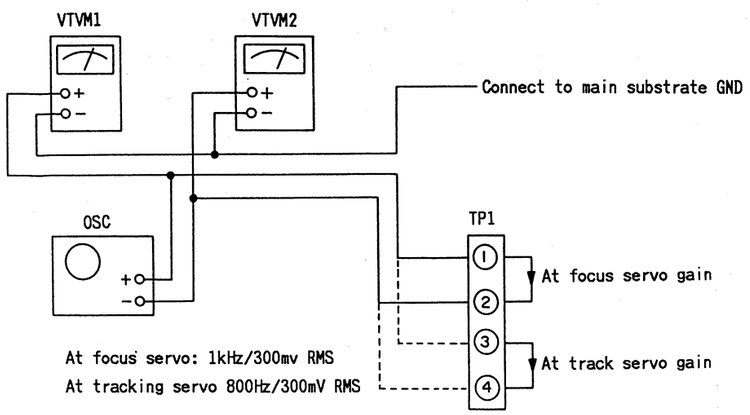
Pin No.	Pin Name	Description	Pin No.	Pin Name	Description
1	−Vcc	Analog negative power supply.	9	Vout	Voltage output.
2	DIG GND	Digital ground.	10	RF	Feedback resistor.
3	+VL	Logic positive power supply.	11	S.J	Summing junction(op amp. input).
4	NC	No connection.	12	ANA GND	Analog ground.
5	CK	Clock input.	13	Iout	Current output.
6	LEC	Latch enable control input.	14	MSB ADJ	MSB adjustment terminal.
7	DATA	Data input.	15	V POT	Potentiometer terminal.
8	−VL	Logic negative power supply.	16	+Vcc	Analog positive power supply.

LC3516AM−15

Pin No.	Pin Name	Description
1~8, 19 22, 23	A0~A10	Address input terminal.
9~11, 13~17	D1~D8	Data I/O terminal.
12	Vss	GND.
18	$\overline{CS}$	Chip enable signal input terminal.
20	$\overline{OE}$	Output enable signal input terminal.
21	WE	Write enable signal input terminal.
24	Vcc	+5V.

As to the IC description of CXA1081M, CXA1082AQ and CXD1135, see the individual service manual of DX-D1/900.

ADJUSTMENT



WAVE FORM

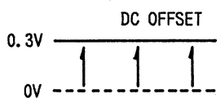


Fig. 1

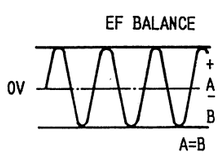
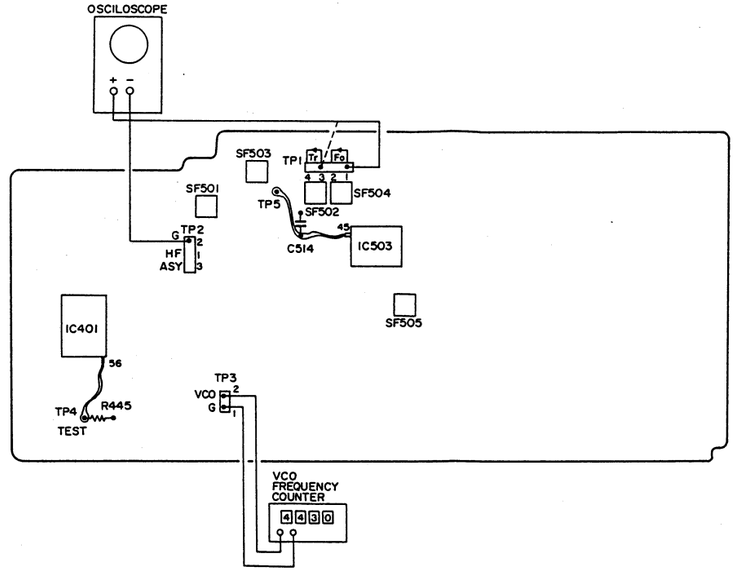


Fig. 2



Order	Item	Setting -1 (input)	Setting -2 (output)	Method	Adjustment location	Spec.
	Use test disc YEDS-18 (type 4).					
1	Focus DC offset	—	Connect an oscilloscope to TP1-1.	• Set to STOP mode.	SF503	0.3V Fig 1
2	VCO	—	Connect a frequency counter to TP3-2.	• Set to STOP mode. • Short TP2-3(ASY) to TP2-2(GND). • Disconnect the shorting pin after adjustment.	SF505	4.43MHz
3	EF balance	Track 1 of test disc.	Connect an oscilloscope (or a DC voltmeter) to TP1-3.	• Short circuit between TP4 and TP3 -1 then turn ON the power. • Play the test disc and short circuit TP5 and TP2-2(GND). • Disconnect the shorting pin after adjustment.	SF501	Symmetrical vertically Fig 2
4	Tracking gain.	Track 1 of test disc. Oscillator	Connect the oscillator and VTVM to TP1-3 and TP1-4.	• Set to PLAY mode.	SF502	The two VTVMs read the same value.
5	Focus gain.	Track 1 of test disc. Oscillator	Connect the oscillator and VTVM to TP1-1 and TP1-2.	• Set to PLAY mode.	SF504	The two VTVMs read the same value.

1. Confirmation of Eye Pattern
   Connect an oscilloscope to test point TP2 (between GND and HF) and confirm the waveform shown in Fig. 3.

2. Confirmation of Laser Power
   Check that the level of the waveform shown in Fig. 3 is approx. 1.5Vp-p.

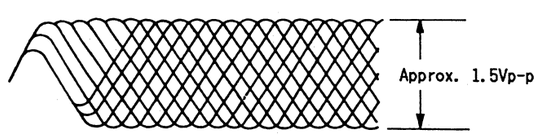
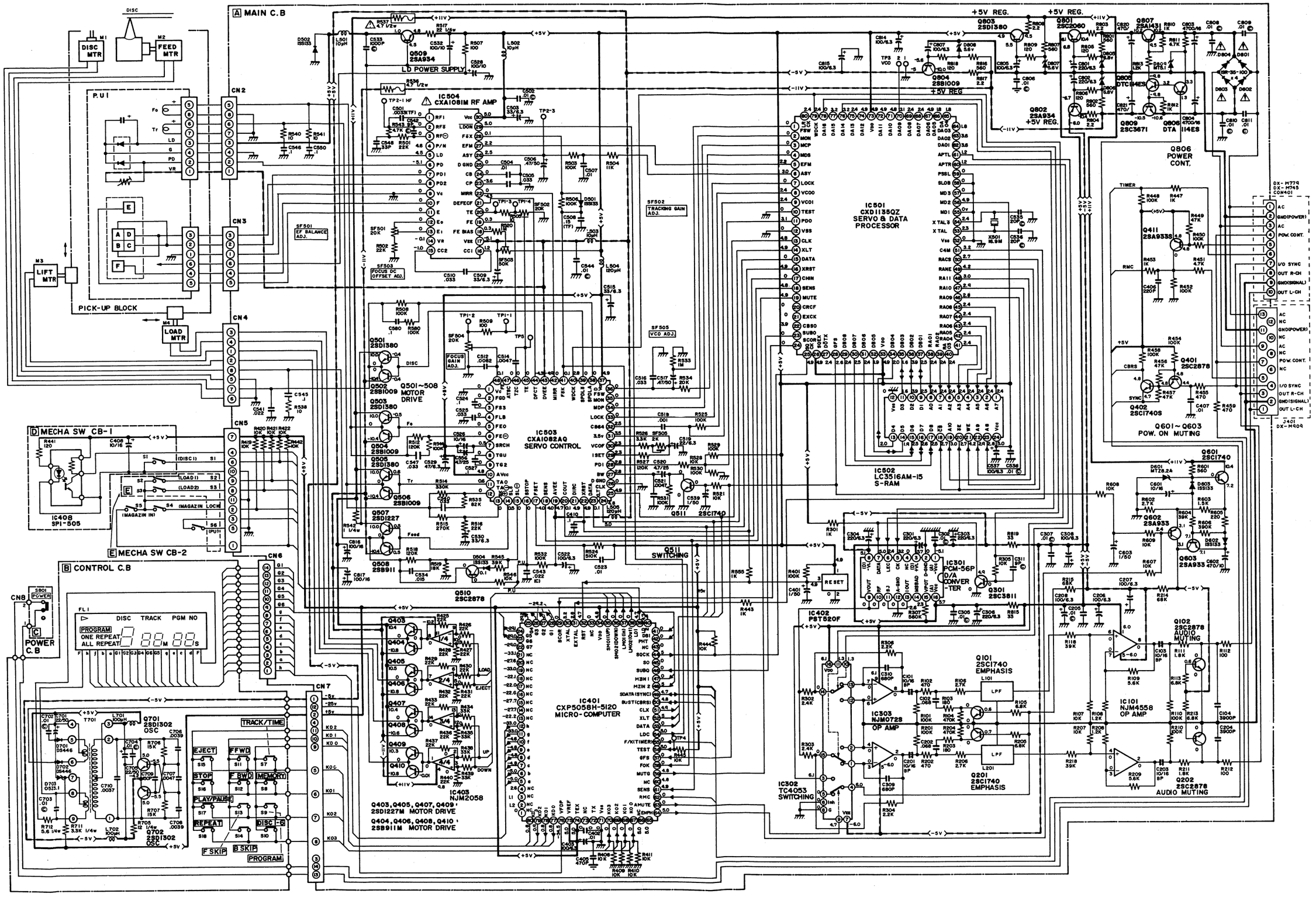
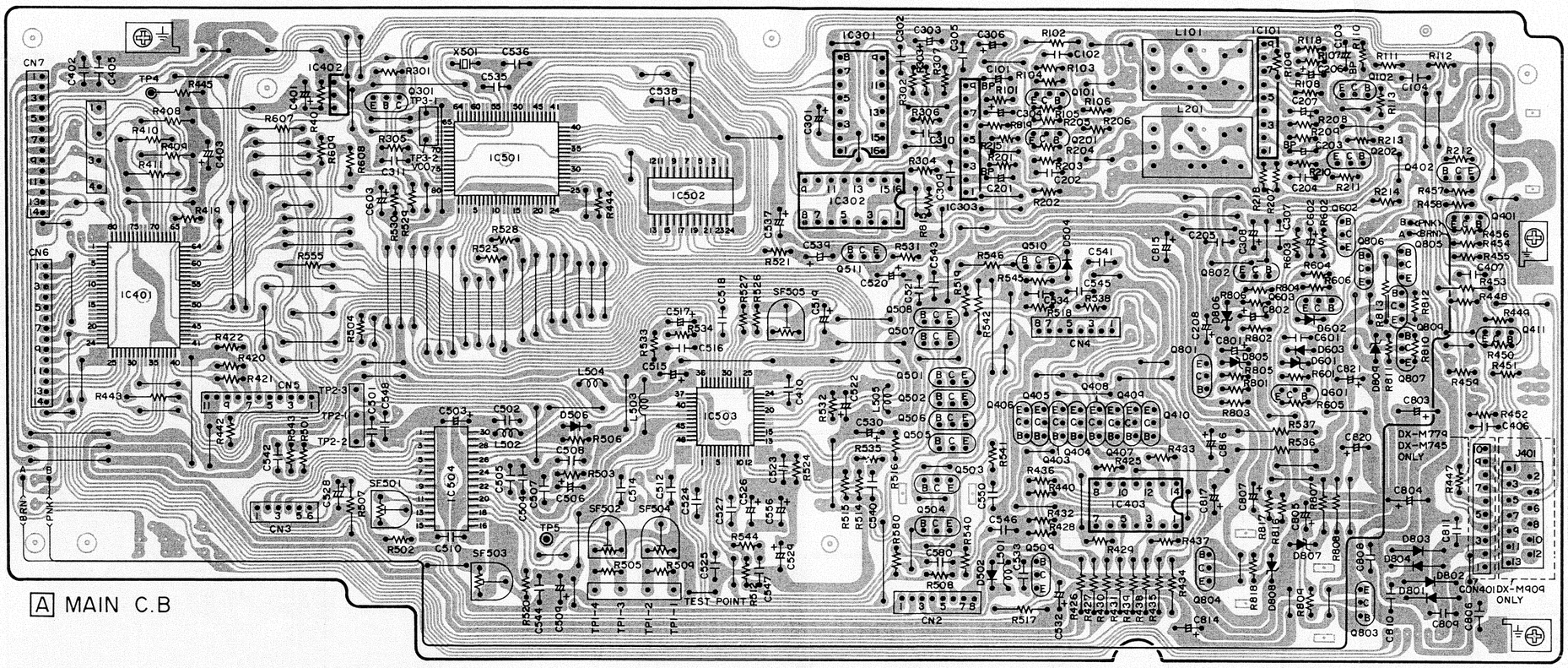
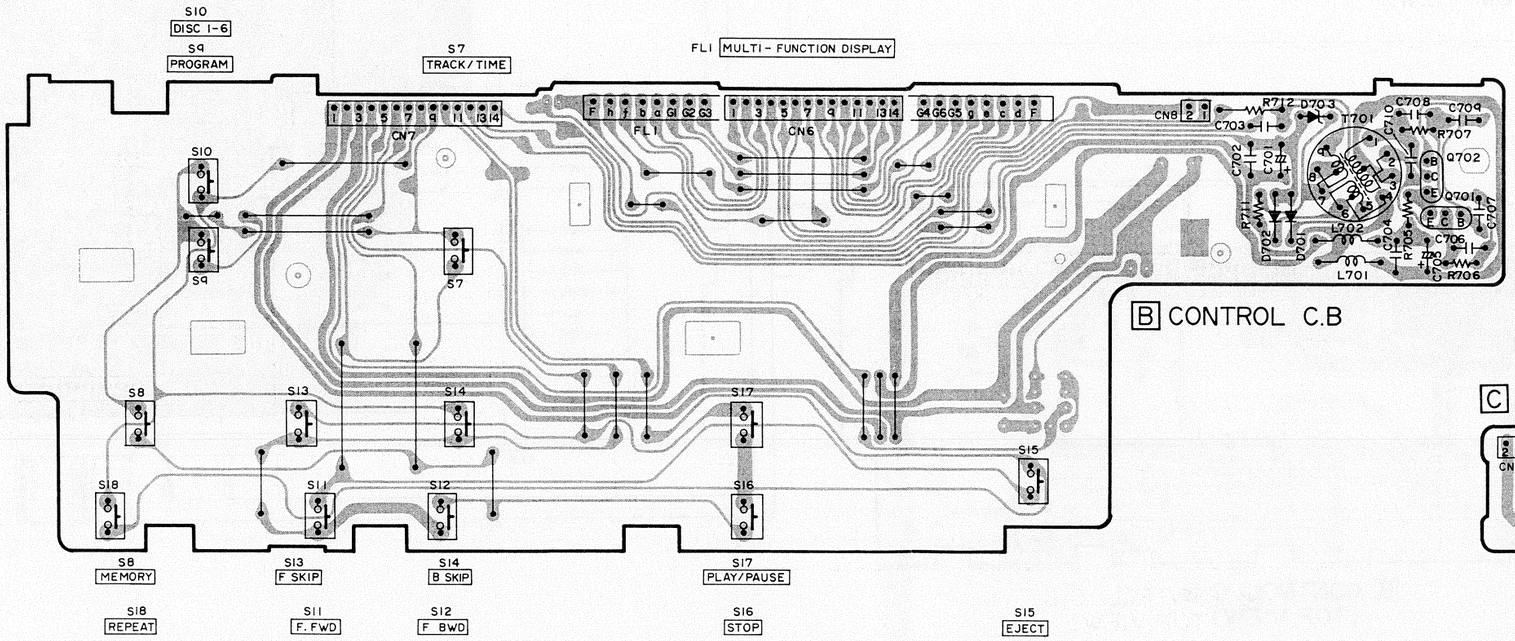


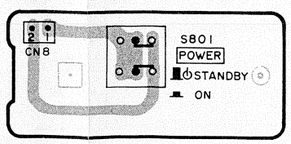
Fig. 3

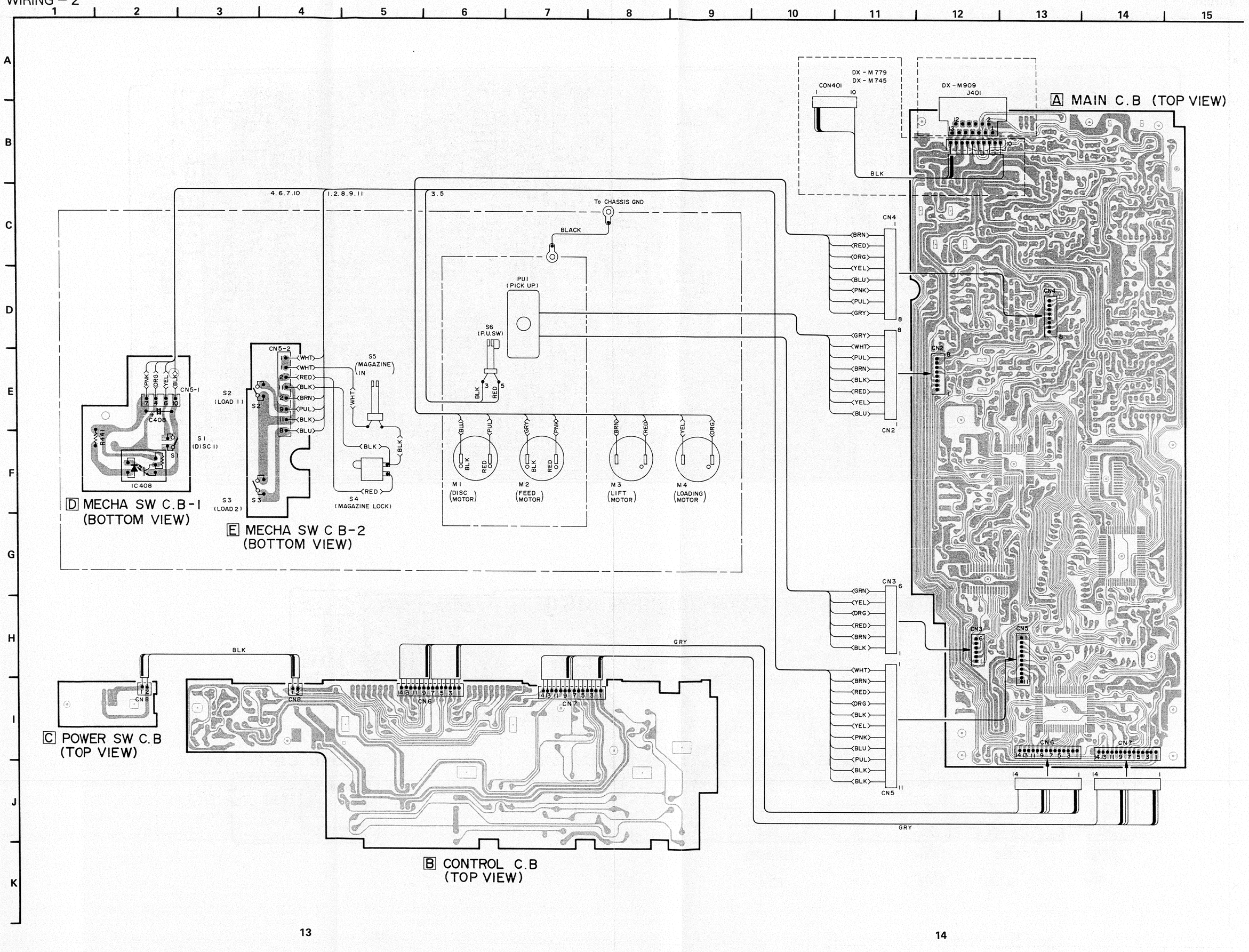

A MAIN C.B
B CONTROL C.B
D MECHA SW CB-1
E MECHA SW CB-2
DISC
M1 DISC MTR
M2 FEED MTR
M3 LIFT MTR
M4 LOAD MTR
P.U.I
PICK-UP BLOCK
CN2
CN3
CN4
CN5
CN6
CN7
CN8
IC504 CXA1081M RF AMP
LD POWER SUPPLY
Q509 2SA934
SF501 EF BALANCE ADJ.
SF502 TRACKING GAIN ADJ.
SF503 FOCUS DC OFFSET ADJ.
SF504 FOCUS GAIN ADJ.
SF505 VCO ADJ
IC501 CXD1135QZ SERVO & DATA PROCESSOR
IC502 LC3516AM-15 S-RAM
IC503 CXA1082AQ SERVO CONTROL
IC401 CXP5058H-5120 MICRO-COMPUTER
IC402 PST520F
IC408 SPI-505
IC301 PCM-56P D/A CONVERTER
IC101 NJM4558 OP AMP
IC303 NJM0722 OP AMP
IC302 TC4053 SWITCHING
IC403 NJM2058
Q501~508 MOTOR DRIVE
Q501 2SD1380
Q502 2SB1009
Q503 2SD1380
Q504 2SB1009
Q505 2SD1380
Q506 2SB1009
Q507 2SD1227
Q508 2SB911
Q403,Q405,Q407,Q409 : 2SD1227M MOTOR DRIVE
Q404,Q406,Q408,Q410 : 2SB911M MOTOR DRIVE
Q510 2SC2878
Q511 2SC1740 SWITCHING
Q603 2SD1380
Q804 2SB1009
Q802 2SA934 +5V REG.
Q801 2SC2060
Q807 2SA1431
Q805 DTC114ES
Q809 2SC3671
Q806 DTA114ES
Q806 POWER CONT.
Q411 2SA933
Q401 2SC2878
Q402 2SC1740S
Q601~Q603 POW. ON MUTING
Q501 2SC1740
Q602 2SA933
Q603 2SA933
Q102 2SC2878 AUDIO MUTING
Q202 2SC2878 AUDIO MUTING
Q101 2SC1740 EMPHASIS
Q201 2SC1740 EMPHASIS
Q701 2SD1302 OSC
Q702 2SD1302 OSC
+5V REG.
+5V REG.
+5V REG
TRACK/TIME
EJECT
FFWD
STOP
F BWD
MEMORY
PLAY/PAUSE
REPEAT
DISC -C
F SKIP
B SKIP
PROGRAM
POWER C.B
FL1
DISC TRACK PGM NO
PROGRAM
ONE REPEAT
ALL REPEAT
LD POWER SUPPLY
PU
LOAD
EJECT
UP
DOWN
FEED
Fo
Tr
LD
G
PD
VR
E
A D
B C
F
DX-M779 DX-M745 CON401
J401 DX-M409
AC
GND(POWER)
POW. CONT.
I/O SYNC
OUT R-CH
GND(SIGNAL)
OUT L-CH
NC
TIMER
RMC
CBRS
SYNC


A MAIN C.B
IC401
IC402
IC501
IC502
IC503
IC504
IC301
IC302
IC303
IC403
L101
L201
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
J401
DX-M779
DX-M745
ONLY
DX-M909
ONLY
TEST POINT
TP1-1
TP1-2
TP1-3
TP1-4
TP2-1
TP2-2
TP2-3
TP3-1
TP3-2
TP4
TP5
X501
Q301
Q401
Q402
Q501
Q502
Q503
Q504
Q505
Q506
Q507
Q508
Q509
Q510
Q511
Q601
Q602
Q701
Q702
Q801
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
SF501
SF502
SF503
SF504
SF505
D501
D502
D601
D602
D603
D604
D701
D702
D703
D801
D802
D803
D804
D805
D806
D807
D808
T701
L501
L502
L503
L504
L505
L701
L702


S10
DISC 1-6
S9
PROGRAM
S7
TRACK/TIME
FL1 MULTI-FUNCTION DISPLAY
S8
MEMORY
S13
F SKIP
S14
B SKIP
S17
PLAY/PAUSE
S18
REPEAT
S11
F. FWD
S12
F BWD
S16
STOP
S15
EJECT
CN6
CN7
CN8
FL1

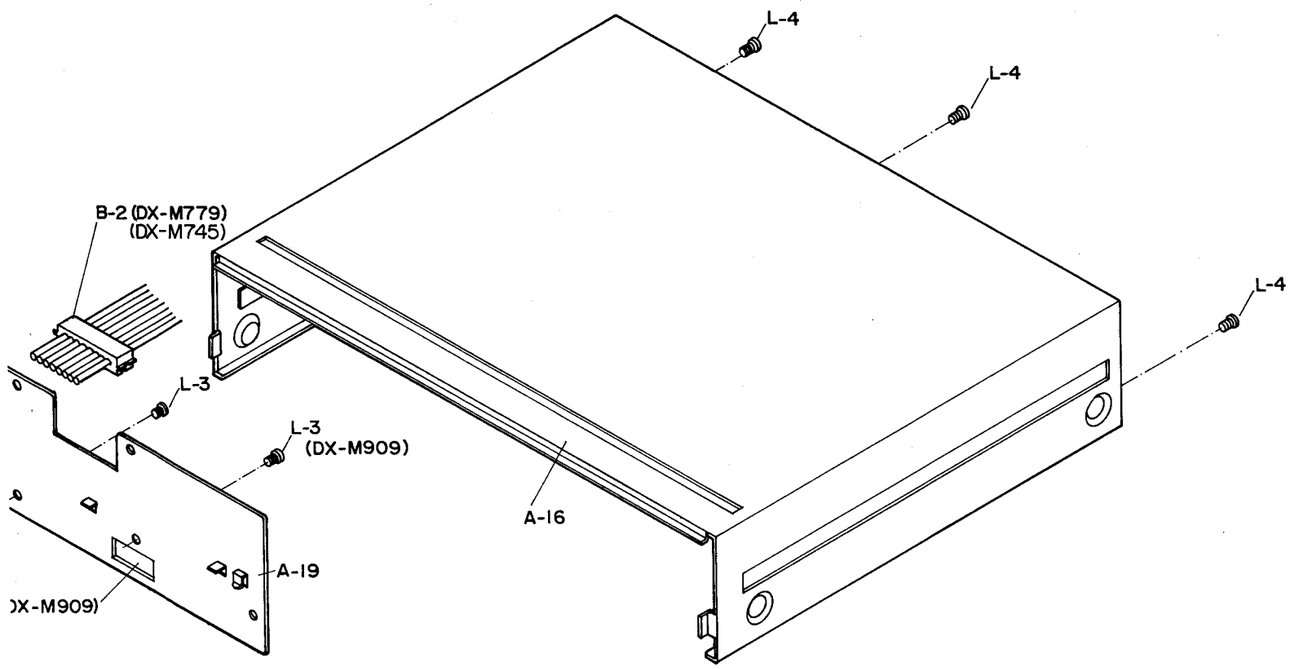
B CONTROL C.B

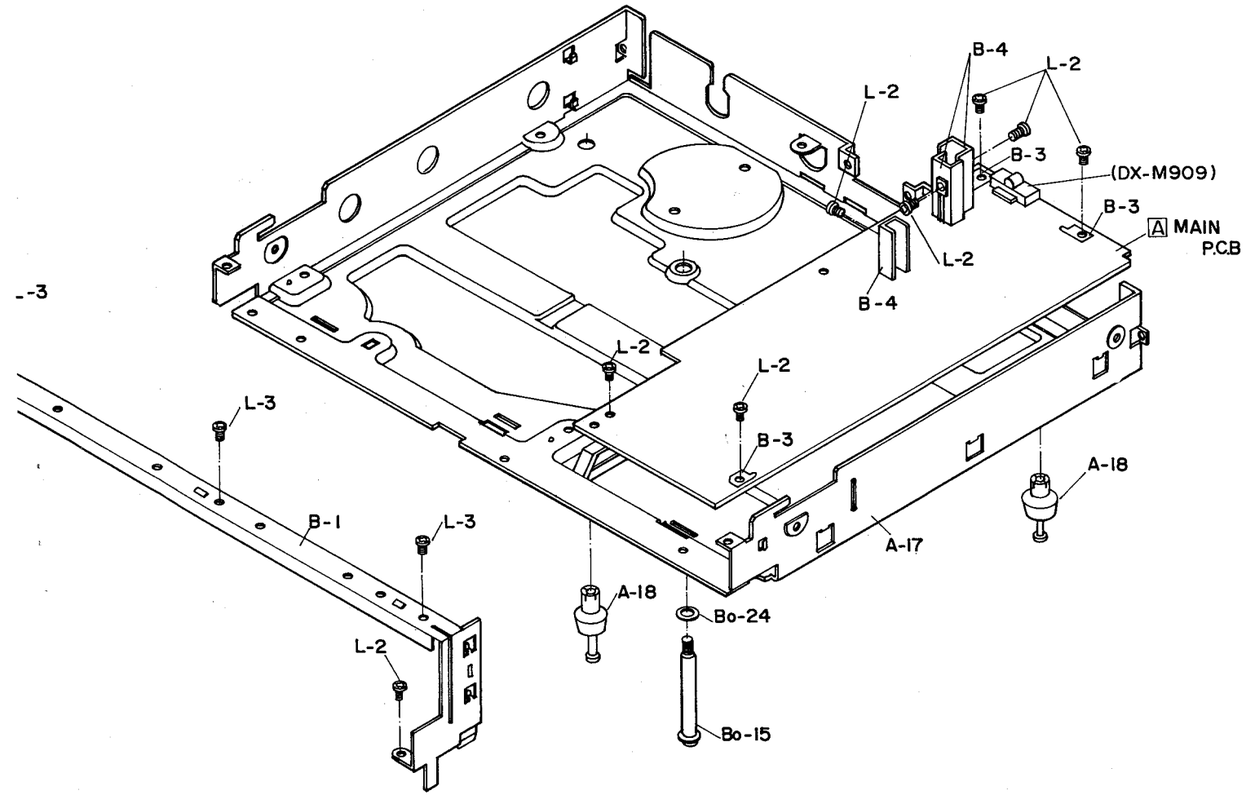

C POWER C.B
CN8
S801
POWER
STANDBY
ON


DX - M779
DX - M745
CON401
DX - M909
J401
A MAIN C.B (TOP VIEW)
4.6.7.10
1.2.8.9.11
3.5
To CHASSIS GND
BLACK
PU1
(PICK UP)
S6
(P.U.SW)
CN4
CN2
CN3
CN5
CN6
CN7
CN1
CN5-1
CN5-2
S1
(DISC 1)
S2
(LOAD 1)
S3
(LOAD 2)
S4
(MAGAZINE LOCK)
S5
(MAGAZINE IN)
M1
(DISC MOTOR)
M2
(FEED MOTOR)
M3
(LIFT MOTOR)
M4
(LOADING MOTOR)
D MECHA SW C.B-1
(BOTTOM VIEW)
E MECHA SW C B-2
(BOTTOM VIEW)
C POWER SW C.B
(TOP VIEW)
B CONTROL C.B
(TOP VIEW)
BLK
GRY

PART NO
CHANGED

L-4
L-4
L-4
B-2 (DX-M779)
(DX-M745)
L-3
L-3
(DX-M909)
A-16
A-19
(DX-M909)
L-1
L-1
L-1
MECHANISM Ass'y
L-2
C POWER
SWITCH
P.C.B
A-15
B-5
B CONTROL
P.C.B
L-3
L-2
L-3
B-1
L-3
L-2
L-3
A-1
L-3
L-3
B-4
L-2
L-2
B-3
(DX-M909)
B-3
A MAIN
P.C.B
L-2
B-4
L-2
L-2
L-2
B-3
A-18
A-17
A-18
Bo-24
Bo-15

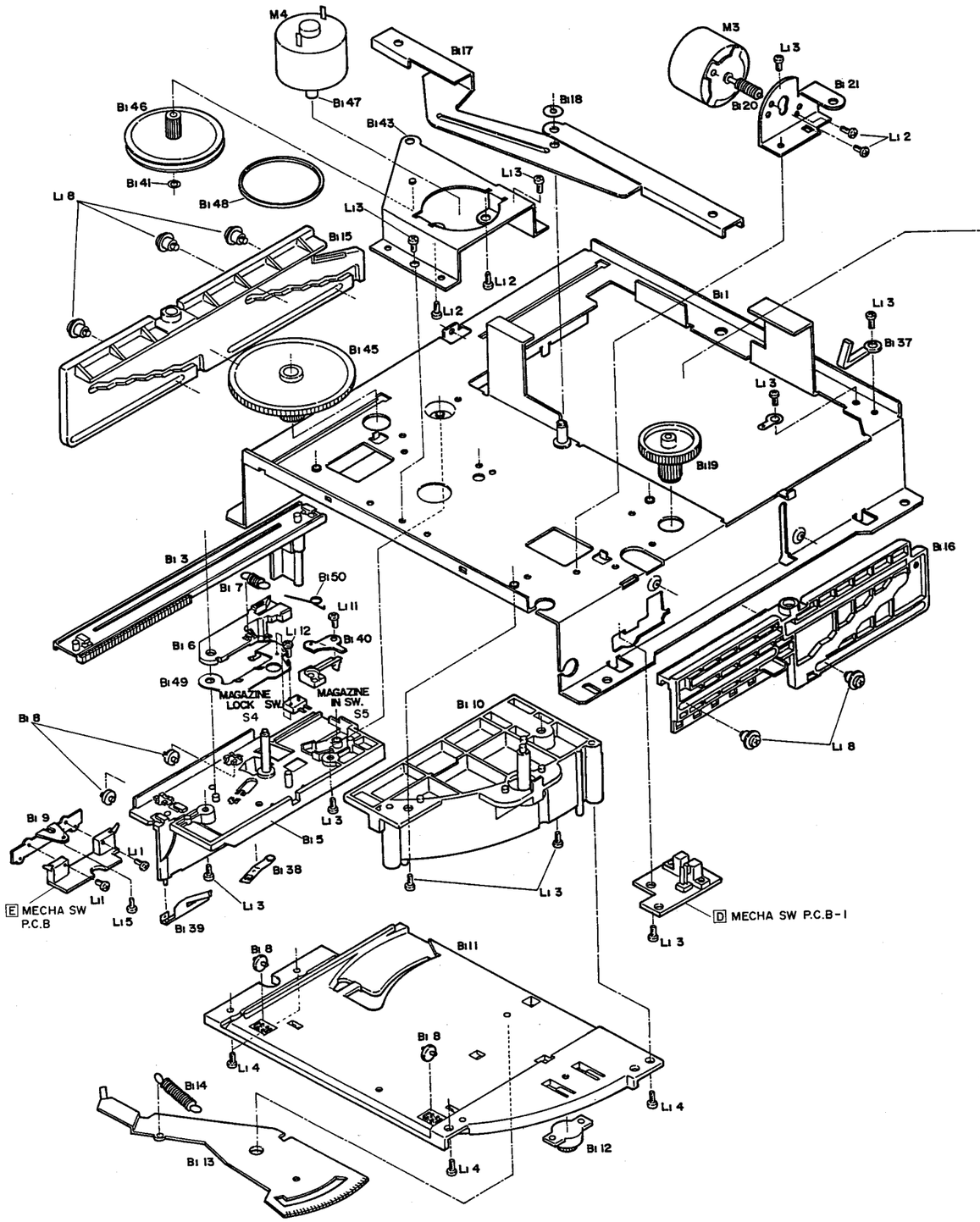


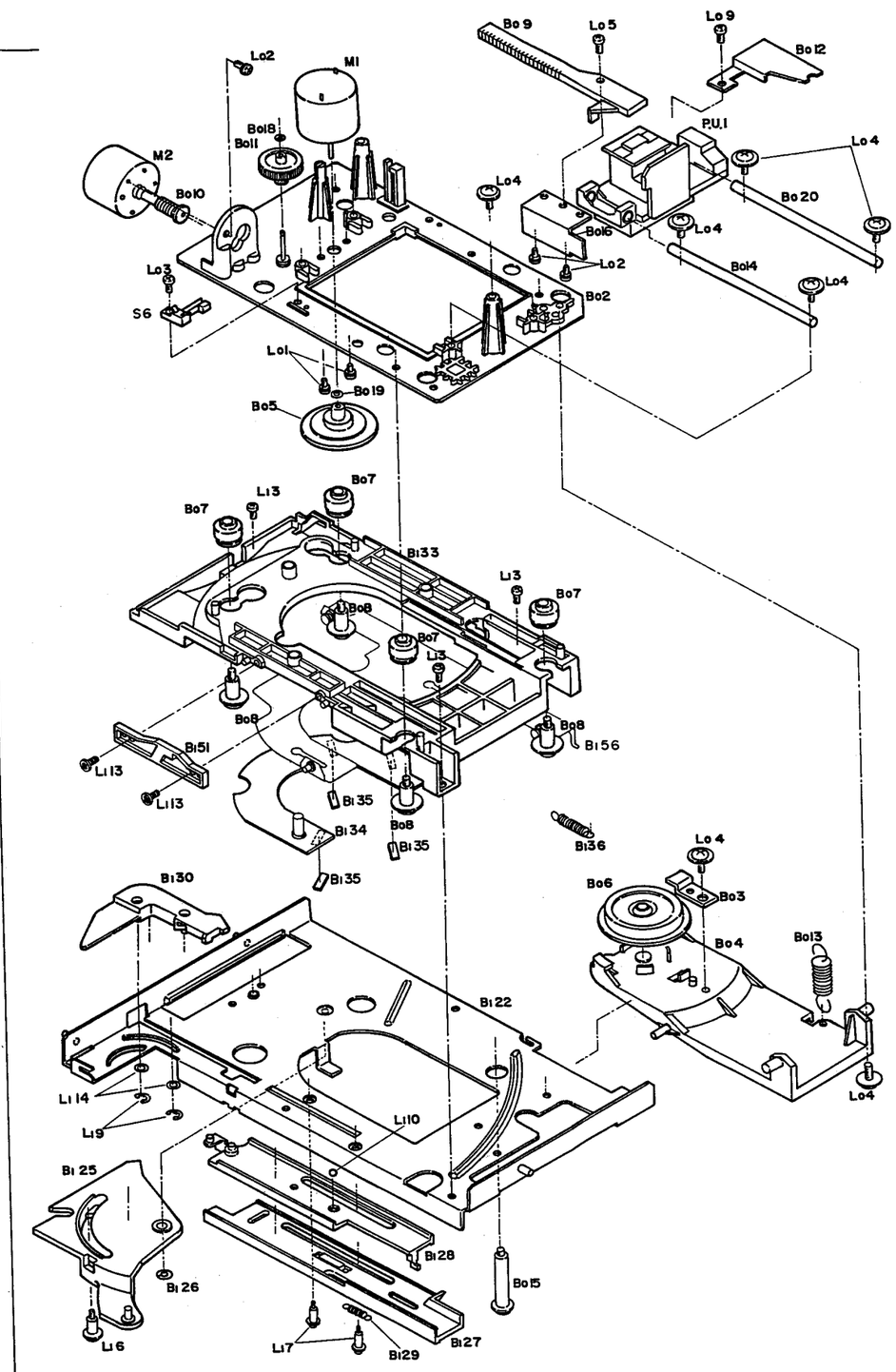


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1A-1	★S2-7F7-061-X00	ASSY PANEL FRONT(M745,M779)		1
	1A-1	★S2-7F7-062-X00	ASSY PANEL FRONT(M909)		1
	1A-15	★81-669-414-010	PUSH BUTTON(M745,M779)		1
	1A-15	★81-669-014-010	PUSH BUTTON(M909)		1
	1A-16	★S2-3C7-745-000	COVER TOP		1
	1A-17	---	CHASSIS		1
	1A-18	★SF-F02-400-000	FOOT CASE		2
	1A-19	★S2-3C7-746-000	PANEL REAR(M779Y,YK)		1
	1A-19	★S2-3C7-747-000	PANEL REAR(M779YU)		1
	1A-19	★S0-RM3-000-120	PANEL REAR(M745)		1
	1A-19	★S2-3C7-749-000	PANEL REAR(M909Y)		1
	1A-19	★S2-3C7-750-000	PANEL REAR(M909YU)		1
	1B-1	★S2-3X9-512-000	METAL FRAME		1
	1B-2	82-114-215-010	CORD BUSHING BP		1
	1B-3	---	TERMINAL GND		3
	1B-4	---	HEAT SINK		3
	1B-5	---	HOLDER,FL		1
	1B0-15	★S2-5W8-970-000	SCREW TRANSPORT		1
	1B0-24	★S2-4W9-746-000	WASHER 2.9-7-0.8MM		1
	1L-1	★SG-BM5-306-000	SCREW BIND M3-6		4
	1L-2	★SG-BMB-308-000	SCREW BIND M3-8		11
	1L-3	★SG-BKB-308-000	SCREW BIND M3-8(M909)		8
	1L-3	★SG-BKB-308-000	SCREW BIND M3-8(M745/M779)		7
	1L-4	★SG-NKB-308-000	SCREW BIND M3-8(φ8)		3

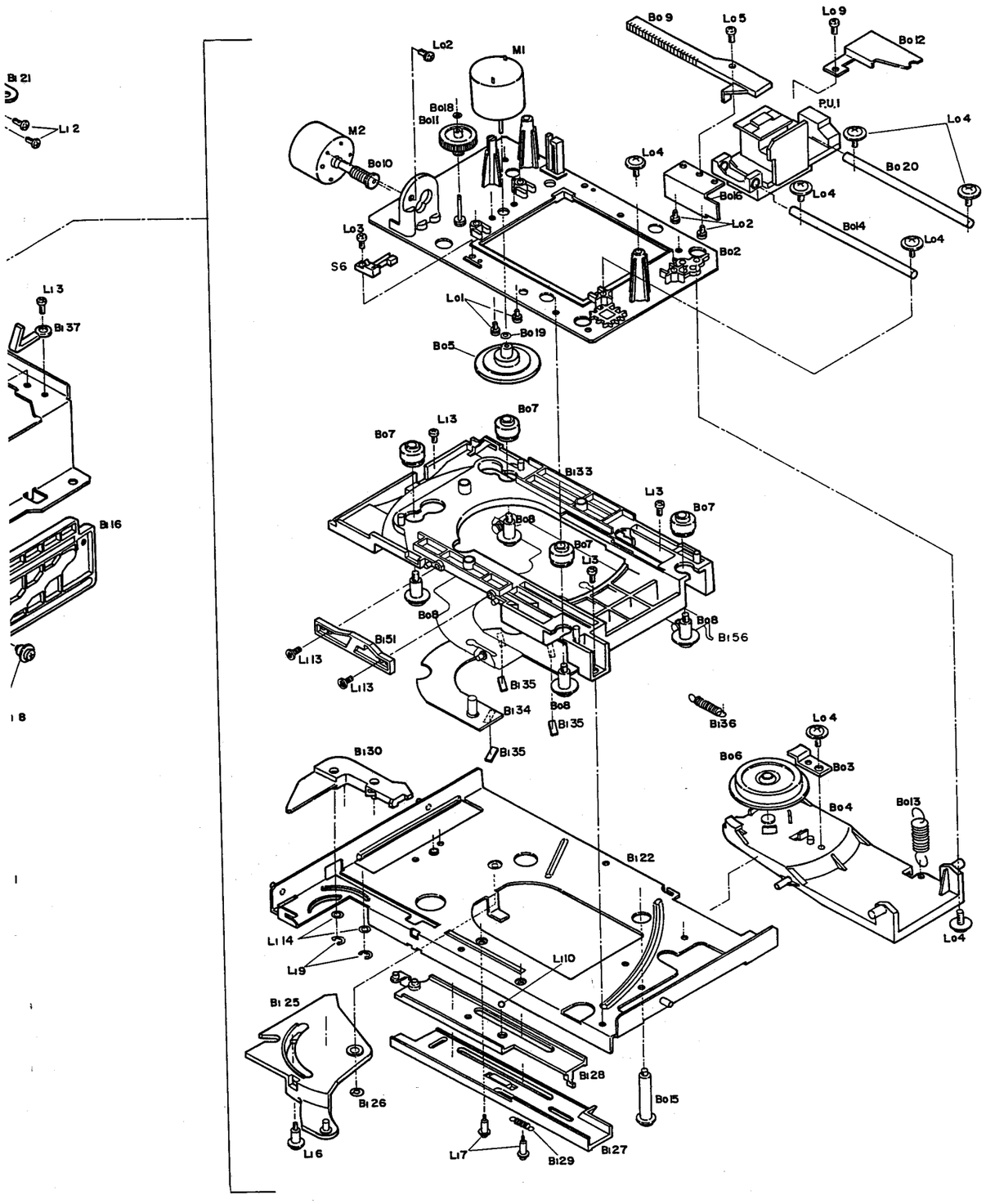
EXPLODED VIEW – 2





PART NO. CHANGED TO

R N



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2B0-2	S2-1S0-026-X00	SUB CHASSIS ASSY		1
	2B0-3	★S2-3X9-472-000	BRACKET ARM CHUCK		1
	2B0-4	★S2-1W8-128-L00	ARM CHUCK		1
	2B0-5	---	TABLE TURN		1
	2B0-6	★S2-1W8-144-000	DISC CHUCK		1
	2B0-7	★S2-1W8-039-000	DAMPER		4
	2B0-8	★S2-2W7-013-000	SCREW DAMPER		4
	2B0-9	★S2-1W8-177-C00	GEAR RACK		1
	2B0-10	---	GEAR WORM		1
	2B0-11	★S2-1W8-161-A00	WHEEL WORM		1
	2B0-12	★S2-3X9-455-000	STOPPER PICK UP		1
	2B0-12	★S2-5W8-953-000	SHAFT GUIDE SUBSIDE		1
	2B0-13	★S2-6W8-046-D00	SPRING COIL		1
	2B0-14	★S2-5W8-952-000	SHAFT GUIDE		1
	2B0-15	---	SCREW TRANSPORT		1
	2B0-16	★S2-3X9-453-C00	PLATE GEAR		1
	2B0-17	---	SHAFT WHEEL WORM		1
	2B0-18	★S2-4W9-653-000	WASHER WHEEL WORM		1
	2B0-19	---	WASHER CHASSIS		1
	2B0-20	S2-5W8-953-000	SHAFT GUIDE		1
	2B0-23	---	CLAMPER WIRE		1
	2B1-1	★S2-3S7-729-HX0	ASSY CHASSIS DECK		1
	2B1-3	★S2-1W8-135-BX0	ASSY RACK FEED		1
	2B1-5	★S2-1W8-226-000	GUIDE MAGAZINE LEFT		1
	2B1-6	★S2-1W8-225-000	ARM LOCK		1
	2B1-7	★S2-6W8-091-000	SPR LOCK ARM		1
	2B1-8	★S2-1W8-140-000	ROLLER		4
	2B1-9	★S2-3X9-471-000	HOLDER B SW		1
	2B1-10	★S2-1W8-193-000	GUIDE MAGAZINE RIGHT		1
	2B1-11	★S2-1W8-201-M00	GUIDE MAGAZINE BOTTOM		1
	2B1-12	★S2-7R7-111-000	DAMPER GEAR		1
	2B1-13	★S2-3X9-389-000	ARM EJECT		1
	2B1-14	★S2-6W8-050-000	SPR EJECT ARM		1
	2B1-15	★S2-1W8-132-B00	GUIDE LEFT		1
	2B1-16	★S2-1W8-133-G00	GUIDE RIGHT		1
	2B1-17	★S2-3X9-387-D00	ARM LIFT		1
	2B1-18	★S2-4W9-634-A00	WASHER STOPPER		1
	2B1-19	★S2-1W8-141-000	GEAR FEED		1
	2B1-20	---	GEAR WORM		1
	2B1-21	★S2-3X9-502-000	BRACKET A MOTOR		1
	2B1-22	★S2-3X9-501-000	ASSY CHASSIS SUBSIDIARY		1
	2B1-25	★S2-1W8-136-000	ARM FEED		1
	2B1-26	★S2-4W9-635-000	WASHER STOP 2.6MM		1
	2B1-27	★S2-1W8-137-000	ARM SLIDE UNDER SIDE		1
	2B1-28	★S2-1W8-138-X00	ASSY ARM SLIDE UP SIDE		1
	2B1-29	★S2-6W8-051-000	SPR SLIDE		1
	2B1-30	★S2-1W8-143-CX0	ASSY ARM D.PUSH		1
	2B1-33	★S2-1W8-231-000	HOLDER MECHANISM		1
	2B1-34	★S2-1W8-232-000	STOPPER DISC		1
	2B1-35	★S2-4W9-744-000	CUSHION DISC		3
	2B1-36	★S2-6W8-093-000	SPR HOLDER DISC		1
	2B1-37	---	CLAMPER WIRE		1
	2B1-38	★S2-3X9-401-000	SPR MAGAZINE UP SIDE		1
	2B1-39	★S2-3X9-509-000	SPR MAGAZINE LEFT		1
	2B1-40	★S2-3X9-417-000	PLATE SW		1
	2B1-41	★S2-4W9-697-000	WASHER STOPPER 2.3MM		1
	2B1-43	★S2-3X9-465-X00	HOLDER MOTOR LOADING		1
	2B1-45	★S2-1W8-205-000	GEAR LOADING		1
	2B1-46	★S2-1W8-206-000	GEAR TRANSMISSION		1
	2B1-47	---	PULLEY MOTOR		1
	2B1-48	S2-1V7-134-000	BELT LOADING		1
	2B1-49	★S2-3X9-483-000	PLATE MOUNT SW		1
	2B1-50	★S2-6W8-090-000	SPR SW		1
	2B1-51	★S2-1W8-233-000	PIECE D.H.CAM		1
	2B1-56	★S2-3X9-508-X00	ASSY HOLDER DISC		1
	2L0-1	★SC-PM3-204-000	SCREW SEMS PAN M2-4		2
	2L0-2	★SC-PM3-205-000	SCREW SEMS PAN M2-5		3
	2L0-3	★SG-PMS-906-000	SCREW PAN M2.6-6		1
	2L0-4	★S2-5W8-929-000	SCREW CUP M3-8		7
	2L0-5	★SC-PM3-906-000	SCREW PAN M2.6-6		1

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	2L0-8	*SG-BMS-306-000	SCREW BIND M3-6		1
	2L0-9	*SC-PM3-904-000	SCREW SEMS PAN M2.6-4		1
	2L0-10	*SS-DM3-206-000	SCREW FLAT HEAD M2-6		2
	2L1-1	*SS-PM3-706-000	SCREW PAN M1.7-6		2
	2L1-2	*SC-PM3-904-000	SCREW PAN M2.6-4		4
	2L1-3	*SG-BMS-306-000	SCREW BIND M3-6		13
	2L1-4	*SG-MBP-310-000	SCREW BIND M3-10		4
	2L1-5	*SG-BMP-306-000	SCREW BIND M3-6		1
	2L1-6	*SY-282-700-000	SCREW M3-4.2		1
	2L1-7	*S2-2W7-009-000	SCREW PAN M2.6-1.6		2
	2L1-8	*SY-472-800-000	SCREW PAN M2.6-1.6		5
	2L1-9	*SE-EU0-025-000	E RING 2.5MM		2
	2L1-10	*SB-0S0-040-000	BALL STEEL 4MM		1
	2L1-11	*SG-BMP-705-000	SCREW BIND M1.7-5		1
	2L1-12	*SS-PM3-705-000	SCREW BIND M1.7-5		1
	2L1-13	*SG-PMP-206-000	SCREW BIND M2-6		2
	2L1-14	*SW-PB3-063-000	WASHER 3-6-0.3MM		2

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	*83-355-901-010	INSTRUCTION BOOOKLET(M779/M909)	*	1
	2	*83-355-903-010	INSTRUCTION BOOKLET(M745)	*	1
	3	*S2-7C7-172-X00	MAGAZINE PACK ASSY	*	1
	4	*S1-760-711-000	CONNECTOR 13P(M909)	*	1